

Title (en)
REFRIGERANT TRANSPORT HOSE, AND POLYAMIDE RESIN COMPOSITION FOR FORMING GAS BARRIER LAYER FOR THE HOSE

Title (de)
KÜHLMITTELTRANSPORTSCHLAUCH UND POLYAMIDHARZZUSAMMENSETZUNG ZUR FORMUNG EINER GASBARRIERESCHICHT FÜR DEN SCHLAUCH

Title (fr)
TUYAU SOUPLE POUR LE TRANSPORT D'UN RÉFRIGÉANT, ET COMPOSITION DE RÉSINE POLYAMIDE POUR LA FORMATION D'UNE COUCHE RÉSISTANT AU GAZ POUR CE TUYAU SOUPLE

Publication
EP 2413010 A4 20130417 (EN)

Application
EP 10756215 A 20100326

Priority

- JP 2010055356 W 20100326
- JP 2009079487 A 20090327
- JP 2009130622 A 20090529
- JP 2009133251 A 20090602
- JP 2009170210 A 20090721

Abstract (en)
[origin: EP2413010A1] A durable refrigerant transporting hose is provided which includes a gas barrier layer made of a polyamide resin composition, and prevented from being degraded by the refrigerant or compressor oil. A refrigerant transporting hose 1 including a gas barrier layer 2 made of a polyamide resin composition. The polyamide resin composition contains at least one metal compound selected from the group consisting of hydroxides, oxides and carbonates of divalent and trivalent metals in an amount of 1% to 15% by weight relative to the total amount of the metal compound and the polymer component. An olefin elastomer may be added to the polyamide resin composition to enhance the flexibility and durability.

IPC 8 full level
C08K 3/22 (2006.01); **C08K 3/26** (2006.01); **C08L 77/00** (2006.01); **F16L 11/04** (2006.01)

CPC (source: EP US)
B60H 1/00571 (2013.01 - EP US); **C08K 3/22** (2013.01 - EP US); **C08K 3/26** (2013.01 - EP US); **F16L 11/082** (2013.01 - EP US); **C08K 2201/008** (2013.01 - EP US); **F16L 2011/047** (2013.01 - EP US); **Y10T 428/1314** (2015.01 - EP US); **Y10T 428/1321** (2015.01 - EP US); **Y10T 428/1372** (2015.01 - EP US); **Y10T 428/1383** (2015.01 - EP US); **Y10T 428/1386** (2015.01 - EP US); **Y10T 428/139** (2015.01 - EP US); **Y10T 428/1393** (2015.01 - EP US)

Citation (search report)

- [Y] DATABASE WPI Week 200405, Derwent World Patents Index; AN 2004-046320, XP002693382
- [XY] DATABASE WPI Week 200382, Derwent World Patents Index; AN 2003-902992, XP002693383
- [X] DATABASE WPI Week 199626, Derwent World Patents Index; AN 1996-255195, XP002693384
- See references of WO 2010110419A1

Cited by
EP2466179A4; EP3587882A4; US8580366B2; WO2018151927A1; US10744696B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2413010 A1 20120201; **EP 2413010 A4 20130417**; **EP 2413010 B1 20170510**; BR PI1014786 A2 20160419; BR PI1014786 B1 20200114; CN 102365488 A 20120229; CN 102365488 B 20140625; US 2012021157 A1 20120126; US 8778472 B2 20140715; WO 2010110419 A1 20100930

DOCDB simple family (application)
EP 10756215 A 20100326; BR PI1014786 A 20100326; CN 201080014135 A 20100326; JP 2010055356 W 20100326; US 201013260280 A 20100326